

REMARKS

The issues outstanding in the Office Action mailed February 26, 2008, are the election/restriction, the Information Disclosure Statement, the objections to the specification and to the claims, and the rejection under 35 U.S.C. 103. Reconsideration of these issues, in view of the following discussion, is respectfully requested.

Election/Restriction

The present compound claims have been amended in order to be directed to elected subject matter. See, for example, formula Ia in the specification. It is respectfully submitted that the restriction should be withdrawn, in as it respects group IV-VI, all of which are drawn to a process in making products of group I, which claims must be rejoined under MPEP §821.04. It is moreover respectfully submitted that claims in group VII-IX, allegedly directed to “use” of the compounds of group I, in fact simply recite compositions containing the compounds of the elected group, i.e., ionic liquids. These compositions should clearly also be rejoined, inasmuch as if the materials of group I are patentable, these claims are also, per se, patentable. Finally, it is submitted that the intermediate claims which have been allowed to remain in the application are linking claims, inasmuch as they represent key intermediates in the process of preparation of the compounds, which as noted above, must be rejoined for examination. Such linking claims must also be maintained with the present claims.

Information Disclosure Statement

At page 4 of the Office Action, it is indicated that the Information Disclosure Statement was in compliance, and has been considered. Despite this, a reference has been crossed off on the Form 1449. It is believed that refusal to consider this reference is the result of a typographical error. An additional Form 1449 listing the correct reference is supplied herewith, and it is submitted that the initialed Form 1449 should be returned with the next action.

Specification

A brief description of the drawings has been added, as requested.

Objections to Claims

It is submitted that in view of the foregoing amendments and following discussion, the claim objections are moot.

Rejection Under 35 U.S.C. 103

Claims 1-3 and 6-8 have been rejected under 35 U.S.C. 103 over Zhou, taken with MacFarlane. Reconsideration of this rejection is respectfully requested.

As noted at page 5 of the Office Action, all compounds disclosed in Zhou are imidazolium derivatives. It is argued, however, in view of MacFarlane that modification of these compounds to pyrrolidinium compounds would be obvious, as the “disclosed salts have similar thermal behavior such as melting point, viscosity, water miscibility, etc.” Applicants respectfully, albeit quite strongly, disagree with this analysis. In fact, in the absence of a close structural similarity, no presumption of prima facie obviousness can exist. One of ordinary skill in the art has absolutely no basis to predict whether the diverse compounds would retain desirable properties, or lose them, with a significant structural modification to the cation. Thus, no modification of Zhou is obvious in view of MacFarlane.

Moreover, MacFarlane merely compares imidazolium dicyanamides and pyrrolidinium dicyanamides with respect to their viscosity. The article teaches that 1-ethyl-3-methylimidazolium dca has a viscosity of 21 cP in comparison to N-butyl-N-methylpyrrolidinium dca with 50 cP. This comparison provides no motivation for one of ordinary skill in the art to substitute imidazolium with pyrrolidinium compounds in the primary reference. In addition to the lack of structural obviousness and the lack of motivation to make such a significant change as above, the presently claimed compounds, in fact, possess unexpectedly advantageous properties, which clearly eliminate any prima facie case of obviousness. It was clearly not predictable that the electrochemical window of pyrrolidinium pentafluorethyltrifluoroborate (-3 to +4 as seen from Fig 1 of the present application) would be

larger than the disclosed electrochemical window of 1-ethyl-3-methylimidazolium pentafluoroethyl trifluoroborate (-2.5 to + 2.5: Fig. 4 of Zhou et al., page 474). The Office Action is predicated on the theory that the cations would have equivalent effect, which is shown not to be accurate. Accordingly, this provides further basis supporting the conclusion of non-obviousness, and thus provides further basis to withdraw the rejection under 35 U.S.C. 103. The same is respectfully requested.

The claims of the application are submitted to be in condition for allowance. However, if the Examiner has any questions or comments, he or she is cordially invited to telephone the undersigned at the number below.

The Commissioner is hereby authorized to charge any fees associated with this response or credit any overpayment to Deposit Account No. 13-3402.

Respectfully submitted,

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